APPENDIX A
LANL ACTIVITY DESCRIPTIONS

IN SUPPORT OF THE
DIRECTED STOCKPILE WORK RESEARCH AND DEVELOPMENT – STOCKPILE SYSTEMS AND STOCKPILE SERVICES
FY 2009 PROGRAM IMPLEMENTATION PLAN

Level 2 Milestone (MRT 3165): Issue the Annual Assessment Report and Director's Annual Assessment letter for the B61.
Due Date: September 2009

Activity Description: This milestone covers the annual assessment reporting process. The annual assessment reporting process is accomplished by delivering the annual B61 briefing to the U.S. Strategic Command Stockpile Assessment Team, issuing the B61 annual assessment report and issuing the Director's annual assessment letter. The annual NA-10 tasking letter specifies major milestones of the annual assessment reporting process. The FY03 National Defense Authorization Act (NDAA) provided specific guidance for the process.

Level 3 Milestones/Grading Criteria:

Description
Submit "Lab," "POG," and "Final" versions of the B61 AAR and prepare/brief the B61 AAR at the SAGSAT review in accordance with cycle 14 instructions, as published in January 2009.

Level 3 Milestones/Exit Criteria:

Description	Due Date
Issue the Annual Assessment Report and the Director's Annual Assessment Letter.	September 2009

Integration/Interfaces: The B61 Program Manager interfaces with the Laboratory annual assessment reporting process coordinator to develop, refine, review, critique and finalize the annual assessment reporting process products. Annual assessment relies on all aspects of the Defense Programs portfolio, including Science, ASC, HEDP, and Engineering Campaigns as well as RTBF support to key facilities.

Risk Identification and Mitigation Strategies: There is little risk to this milestone. The annual assessment reporting process has a high priority at LANL. Personnel who are responsible for supporting the milestones are aware of the importance of this process and make the resources available to accomplish it on time.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: Patti Buntain, B61 Program Manager, 505-665-4818, pbuntain@lanl.gov

Level 2 Milestone (MRT 3166): Identify and complete continuous activities necessary for supporting current/future Annual Assessment Reports for the B61.
Due Date: September 2009

Activity Description: The assessment of the safety, reliability and performance of the B61 warhead is a continuous process. The scientific basis for that continuous process is the Stockpile Stewardship Program (SSP).

Conduct of the ongoing assessment process is guided by expert judgment and an understanding of the information needed to support the annual assessment reporting process. The activities that support the completion of the reporting process include Design Agency analyses of historical and past-year production surveillance results, the knowledge gained from closure of or work supporting resolution of significant finding investigations, the results of small-scale and integrated tests and experiments, the current state of and progress made in improving baseline models, the knowledge gained from modeling and simulation, the results of studies and any other activities that contribute to understanding the safety, reliability and performance of the B61 warhead. The deliverables associated with these activities include the LANL input to the B61 cycle surveillance report, the LANL input to the semi-annual NNSA Weapon Reliability Report, meeting significant finding investigation closure plan deliverables and issuing the annual baseline summary memorandum. In FY09, continuation of development of ASC-based physics baselines and using them for initial end-to-end calculations is a priority. Review of engineering test and evaluation against engineering models will continue in FY09.

Level 3 Milestones/Grading Criteria:

Description
1. First primary baseline for stockpile mods.
2. Initial end-to-end ASC model for two UGT events.
3. Review and evaluate CE-3 test data.
4. Review and evaluate Alt 357 REST unit data
5. Provide NEP surveillance information for inclusion in Weapon Cycle Selection Letter to SNL by October 31, 2008 for FY 2011 cycle work.
6. Issue Cycle Selection surveillance information (identifying requirements for all system and component level assessments) via BC document to PAs and NNSA by July 2009 for all cycles starting in FY 2010.
7. Support surveillance disassemblies at Y-12
8. Collect and analyze material properties to support material modeling and simulation.

Level 3 Milestones/Exit Criteria:

Description	Due Date
1. Provide NNSA-121.31 with a high-level summary of the activities that were performed including a list of completed supporting reports. 2. Initial methodology developed for modeling and simulation for surrogate material use.	September 2009

Integration/Interfaces: Integration with B61 project team members at SNL is required to avoid duplication and ensure accuracy. The B61 Program Manager interfaces with primary and secondary designers, the system engineer, the surveillance engineer and other subject matter experts to compile, evaluate and organize the data and information necessary to continuously assess the safety, reliability and performance of the B61 warhead variants. The results of this ongoing assessment are captured for the annual assessment reporting process. Integration with B61 project team members at SNL is required to concurrently assess the effects of SNL activities.

Risk Identification and Mitigation Strategies: There is little risk to this milestone. The continuous assessment process is the core activity of the Stockpile Stewardship Program. Personnel who are responsible for supporting the milestones are aware of the importance of this process and make the resources available to accomplish it on time. Risks associated with closing significant finding investigations and conducting integrated hydrodynamic tests are discussed in other Level 2 milestones.

Surveillance of stockpile units is a key element of the Stockpile Stewardship Program and provides insight on the condition and life assessment of stockpiled units. Although improved there remains an ongoing risk resulting from historic backlogs in surveillance activities at Pantex, which cascades into backlogs of component surveillance at Y-12, the Savannah River Site, the Kansas City Plant and LANL. Current mitigation efforts include an integrated review of surveillance requirements, identification of surveillance choke points at Pantex and an examination of SS-21 project priorities at Pantex.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: Patti Buntain, B61 Program Manager, 505-665-4818, pbuntain@lanl.gov

---

Level 2 Milestone (MRT 3168): Identify and complete continuous activities necessary for supporting current/future Annual Assessment Reports for the W76.
Due Date: September 2009

Activity Description: The assessment of the safety, reliability and performance of the W76-0 warhead is a continuous process. The scientific basis for that continuous process is the Stockpile Stewardship Program (SSP).

Conduct of the ongoing assessment process is guided by expert judgment and an understanding of the information needed to support the annual assessment reporting process. The activities that support the completion of the reporting process include Design Agency analyses of historical and past-year production surveillance results, the knowledge gained from closure of or work supporting resolution of significant finding investigations, the results of small-scale and integrated tests and experiments, the current state of and progress made in improving baseline models, the knowledge gained from modeling and simulation, the results of studies and any other activities that contribute to understanding the safety, reliability and performance of the W76-0 warhead. The deliverables associated with these activities include the LANL input to the W76-0 cycle surveillance report, the LANL input to the semi-annual NNSA Weapon Reliability Report and issuing the annual baseline summary memorandum. An ASC-based physics baseline for the W76 has been developed as part of the W76-1 effort. This baseline will be used for future assessments of the W76-0 as necessary. It is expected that necessary actions may develop from the disassembly of the W76-0 as part of the W76-1 LEP.

Level 3 Milestones/Grading Criteria:

Description
1. Develop first generation common physics baseline and report progress as part of Annual Assessment.
2. Develop next generation physics baseline incorporating validated rad flow and report progress as part of Annual Assessment.
3. Incorporate LEP Abnormal thermal results into an improved System thermal engineering model.
4. Develop updated HE (PBX 9501) material models based on areas of interest identified during W76-1 System Engineering Qualification.
5. Provide NEP surveillance information for inclusion in Weapon Cycle Selection Letter to SNL by October 31, 2008 for FY 2011 cycle work.
6. Issue Cycle Selection surveillance information (identifying requirements for all system and component level assessments) via BC document to PAs and NNSA by July 2009 for all cycles starting in FY 2010.
7. Complete certification of an alternate material design for the W76-1 CSA.

other subject matter experts to compile, evaluate and organize the data and information necessary to continuously assess the safety, reliability and performance of the W78 warhead. The results of this ongoing assessment are captured for the annual assessment reporting process. Integration with W78 project team members at SNL is required to concurrently assess the effects of SNL activities.

Risk Identification and Mitigation Strategies: There is little risk to this milestone. The continuous assessment process is the core activity of the Stockpile Stewardship Program. Personnel who are responsible for supporting the milestones are aware of the importance of this process and make the resources available to accomplish it on time. Risks associated with closing significant finding investigations and conducting integrated hydrodynamic tests are discussed in other Level 2 milestones.

Surveillance of stockpile units is a key element of the Stockpile Stewardship Program and provides insight on the condition of stockpiled units. These results influence the assessment of safety, reliability and performance. There is at present an ongoing risk resulting from backlogs in surveillance activities at Pantex, which cascades into backlogs of component surveillance at Y-12, the Savannah River Site, the Kansas City Plant and LANL.

Points of Contact:

Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov

Secondary: Ezekiel (Zeke) D. Aragon, W78 Program Manager, 505-667-6300, zeke@lanl.gov

Level 2 Milestone (MRT 3177): Issue the Annual Assessment Report and Director's Annual Assessment letter for the W88.
Due Date: September 2009

Activity Description: This milestone covers the annual assessment reporting process. The annual assessment reporting process is accomplished by delivering the annual W88 briefing to the U.S. Strategic Command Stockpile Assessment Team, issuing the W88 annual assessment report and issuing the Director's annual assessment letter. The annual NA-10 tasking letter specifies major milestones of the annual assessment reporting process. The FY03 National Defense Authorization Act (NDAA) provided specific guidance for the process.

Level 3 Milestones/Grading Criteria:

Description
Submit "Lab," "POG," and "Final" versions of the W88 AAR and prepare/brief the W88 AAR at the SAGSAT review in accordance with cycle 14 instructions, as published in January 2009.

Level 3 Milestones/Exit Criteria:

Description	Due Date
Issue the Annual Assessment Report and the Director's Annual Assessment Letter for the W88.	September 2009

Integration/Interfaces: The W88 Program Manager interfaces with the Laboratory annual assessment reporting process coordinator to develop, refine, review, critique and finalize the annual assessment reporting process products. Annual assessment relies on all aspects of the Defense Programs portfolio, including Science, ASC, HEDP, and Engineering Campaigns as well as RTBF support to key facilities.

Risk Identification and Mitigation Strategies: There is little risk to this milestone. The annual assessment reporting process has a high priority at LANL. Personnel who are responsible for supporting the milestones are aware of the importance of this process and make the resources available to accomplish it on time.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: J. Patrick Garcia, W88 Program Manager, 505-665-4687, jpgarcia@lanl.gov

Level 2 Milestone (MRT 3178): Identify and complete continuous activities necessary for supporting current/future Annual Assessment Reports for the W88.
Due Date: September 2009

Activity Description: The assessment of the safety, reliability and performance of the W88 warhead is a continuous process. The scientific basis for that continuous process is the Stockpile Stewardship Program (SSP).

Conduct of the ongoing assessment process is guided by expert judgment and an understanding of the information needed to support the annual assessment reporting process. The activities that support the completion of the reporting process include Design Agency analyses of historical and past-year production surveillance results, the knowledge gained from closure of or work supporting resolution of significant finding investigations, the results of small-scale and integrated tests and experiments, the current state of and progress made in improving baseline models, the knowledge gained from modeling and simulation, the results of studies and any other activities that contribute to understanding the safety, reliability and performance of the W88 warhead. The deliverables associated with these activities include the LANL input to the W88 cycle surveillance report, the LANL input to the semi-annual NNSA Weapon Reliability Report, meeting significant finding investigation closure plan deliverables and issuing the annual baseline summary memorandum.

Level 3 Milestones/Grading Criteria:

Description
1. First generation common baseline
2. First baseline with validated rad flow and burn
3. Continue process development supporting insert removal from E-configurations.
4. Establish first engineering baseline model of blast environment.
5. Continue support of CSA material aging prediction.
6. Provide NEP surveillance information for inclusion in Weapon Cycle Selection Letter to SNL by October 31, 2008 for FY 2011 cycle work.
7. Issue Cycle Selection surveillance information (identifying requirements for all system and component level assessments) via BC document to PAs and NNSA by July 2009 for all cycles starting in FY 2010.

Level 3 Milestones/Exit Criteria:

Description	Due Date
Provide NA-121.31 with a high-level summary of the activities that were performed including a list of completed supporting reports.	September 2009

Integration/Interfaces: Integration with W88 project team members at SNL is required to avoid duplication and ensure accuracy. The W88 Program Manager interfaces with primary and secondary designers, the system engineer, the surveillance engineer and

other subject matter experts to compile, evaluate and organize the data and information necessary to continuously assess the safety, reliability and performance of the W88 warhead. The results of this ongoing assessment are captured for the annual assessment reporting process. Integration with W88 project team members at SNL is required to concurrently assess the effects of SNL activities. Engineering campaign continues material strength research needed for specific evaluations.

Risk Identification and Mitigation Strategies: There is little risk to this milestone. The continuous assessment process is the core activity of the Stockpile Stewardship Program. Personnel who are responsible for supporting the milestones are aware of the importance of this process and make the resources available to accomplish it on time. Risks associated with closing significant finding investigations and conducting integrated hydrodynamic tests are discussed in other Level 2 milestones.

Surveillance of stockpile units is a key element of the Stockpile Stewardship Program and provides insight on the condition of stockpiled units. These results influence the assessment of safety, reliability and performance. There is at present an ongoing risk resulting from historic backlogs in surveillance activities at Pantex, which has been cleared, however, continues to contribute to backlogs of component surveillance at Y-12, the Savannah River Site, the Kansas City Plant and LANL. Current mitigation efforts include an integrated review of surveillance requirements, identification of surveillance choke points at Pantex and an examination of SS-21 project priorities at Pantex. For the W88, LANL has also piloted a pit surveillance modernization study to identify improvements and efficiencies to pit surveillance processes and modify surveillance activities to improve data quality. The lessons learned from this exercise will be applicable to other pit types.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: J. Patrick Garcia, W88 Program Manager, 505-665-4687, jpgarcia@lanl.gov

Level 2 Milestone (MRT 3182): Submit Refurbishment Options Discussions and Tables for the FY 2010 Technical Basis for Stockpile Transformation Planning (TBSTP) Document.
Due Date: June 2009

Activity Description: This milestone describes an administrative task. It is met by reviewing annual assessment documents, warhead briefings and significant finding investigations to identify potential issues that might become elements of a life extension activity in the future. This information is formatted, reviewed, briefed and submitted to NNSA.

Level 3 Milestones/Grading Criteria:

Description
1. Support the efforts to identify needed changes in content and format that may be required to support the expanded uses of the document. 2. Identify refurbishment options (ROs) in accordance with the scope of the TBSTP document, as developed and agreed by NA-121.3 and the design and production agencies. 3. Support TBSTP planning and technical meetings. 4. Submit for review and comment a draft of required input to the TBSTP document in accordance with the agreements between NA-121.3, NA-122.2, and the design and production agencies by May 15, 2009. 5. Support revisions to the FY 2008 document as required by publication of the Production and Planning Document (P&PD) for FY 2009.

Level 3 Milestones/Exit Criteria:

Description	Due Date
Submit required input to the TBSTP document in accordance with the agreements between NA-121.3, NA-122.2, and the design and production agencies by June 16, 2009.	June 2009

Integration/Interfaces: Personnel responsible for the process described above are embedded within the LANL Weapons Program. Data provided from the DSW core surveillance activities and from the Enhanced Surveillance Campaign is the primary input to any proposed changes in component lifetimes.
Risk Identification and Mitigation Strategies: There is essentially no risk to this Milestone.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: ,Charles Hills, System Surveillance Group Leader, 505-665-9282, hills@lanl.gov

Level 2 Milestone (MRT 3183): Provide input to the FY 2009 Nuclear Safety R&D (NSR&D) Working Group (WG) Annual Report and conduct FY09 NSR&D activities in accordance with the FY 2009 NSR&D WG Annual Report.
Due Date: September 2009

Activity Description: Maintaining the safety and security of nuclear weapons is the highest priority programmatic activity. In recognition of this, the NNSA has established the Nuclear Safety Research and Development Working Group (NSRDWG) to identify, coordinate, and nurture an integrated program to meet these requirements. As a member of this Working Group, LANL is committed to activities that address potential safety issues with nuclear warheads.
There are three layers of work that support the overall LANL warhead safety program. These include:

- Maintaining a safe working environment for nuclear explosives at LANL, Pantex and the Device Assembly Facility (DAF) at the Nevada Test Site.
- Conducting fundamental research and development activities that support the resolution of issues associated with nuclear explosives operations.
- Supporting a national program to assess the state of nuclear warhead surety.

Maintenance of safe working environments, including nuclear explosives work, is the purpose of and embedded within, the Integrated Safety Management (ISM) program at LANL.

Determination of the effectiveness of that program with respect to nuclear explosives safety will be accomplished by self-assessment.

Maintaining a safe working environment at Pantex and the DAF is the responsibility of Pantex and DAF management, but LANL provides technical analyses and personnel resources to support the development and implementation of technically correct processes and procedures that result in safe nuclear explosives operations at Pantex and the DAF.

Resolution of nuclear explosives safety issues is based on technical analysis of specific conditions as well as fundamental research. LANL activities in FY09 will focus on the areas as agreed to as part of this milestone.

Level 3 Milestones/Grading Criteria:

Description
1. Pantex and Design Laboratory prepare a prioritized list of nuclear explosive safety R&D (NSR&D) activities supporting the Pantex requirements in accordance with the schedule set forth in Grading Criteria 3 and 4.
2. Y-12, Pantex, and design agency prepare a list of NSR&D activities supporting Y-12

conjunction with the SS-21, hydrodynamic tests, DynEx, Sub-Critical Experiments, and Emergency Response activities at planned levels.

- Mitigation – Detailed work packages and resource loaded plans have been established for the various elements of the LANL Surety WBS. The NSRDWG will establish priorities and ensure integration across the complex.

Experimental execution:

- Risk – Unavailability of parts, resource shortages, lack of integrated resource planning and management can adversely affect the execution of surety tests used to acquire data for analysis and impact the overall schedule.
- Mitigation – Experimental resource availability remains an issue due to competing missions in the nuclear weapons complex. Close coordination with other programs (i.e. LEPs, hydrodynamic test program), proper planning and integration with the other entities (LLNL, SNL and Pantex) will help identify and mitigate conflicts.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: David Montoya, Surety Group Leader, 505-665-2201, dmmontoya@lanl.gov

successful closure of SFIs requires clearly constructed plans identifying internal/external resources and processes. It is the applicable warhead manager's responsibility to coordinate these efforts through an integrated SFI team. This team is responsible for addressing all of the technical concerns pertaining to the SFI. The team is required to update progress made toward closure of the SFI.

Risk Identification and Mitigation Strategies: Other LANL priority programs, such as life extension projects compete for resources that are needed to address SFIs. Sometimes the limited number of trained and qualified personnel creates conflicts where resources must be shifted to cover priority programs. Mitigation of this risk is being accomplished by balancing personnel resources to best meet multiple programmatic priorities, judicious use of retired personnel to mentor technical staff and hiring new personnel. The LANL Weapon Systems Division monitors the progress of SFI closure and the balancing of resources among competing programmatic activities.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: Charles Hills, Surveillance Group Leader, 505-665-9282, hills@lanl.govmailto:

Level 2 Milestone (MRT 3185): Issue FY 2009 Joint National Hydrodynamic Test Plan (NHTP), Conduct Hydrodynamic Tests In Accordance With The FY 2009 NHTP, And Provide Quarterly One-Table Updates.
Due Date: September 2009

Activity Description: The Hydrodynamic Test Program (HTP) executes specific hydrodynamic tests and maintains the core capabilities and improvements necessary for design, fabrication and execution of these integrated experiments. Major core competencies include the following capabilities:

- Design hydrodynamic test devices while optimizing experimental data fidelity and cost effectiveness
- Procure and/or fabricate device hardware (including machining, inspection and non-destructive evaluation).
- Assemble high fidelity test devices.
- Transport test devices on-site.
- Design and execute hydrodynamic test experiments with supporting diagnostics to provide the best data possible.
- Develop hydrodynamic test diagnostics, analysis techniques and the associated infrastructure to optimize utility of hydrodynamic test activities
- Analyze, assess, document and archive hydrodynamic test data to meet customer needs.

The HTP supports a variety of stockpile activities including annual assessments (baselining, SFI resolution, engineering, pre-production and production prototypes, aging phenomena and response at STS extremes), safety and surety studies, surveillance, model validation and operational support and execution for other organizations (Lawrence Livermore National Laboratory and AWE). The HTP also helps to maintain the competencies necessary for execution of integral experiments supporting Pit Manufacturing and Certification as well as Emergency Response.

Relevant activities for FY2009 are to follow the experimental program as delineated in the Five-Year National Hydrodynamic Test Plan. The activities encompass both executing and analyzing specific FY2009 hydrodynamic tests, as well as designing, procuring and assembling hydrodynamic tests scheduled for FY2010 and FY2011. In particular, the FY2009 shot schedule is currently comprised of hydrodynamic tests requiring dual axis capability, surety studies, advanced certification, and SFI closure.

In addition to executing the National Hydrodynamic Test Plan, the HTP will continue investing in the capabilities required to perform 4-6 high quality hydrodynamic tests per year in the near-term and up to 12 tests per year in the longer-term at the DARHT facility. This includes the following:

- Ensuring safe and efficient operations at the Dual Axis Radiographic Hydrodynamic Test (DARHT) facility and supporting facilities.

Hydrodynamic Test Plan, which is integrated across LANL and LLNL, reviewed by senior management at both Laboratories and submitted to NNSA annually. The associated plan and schedule is consistent with this IP.

To minimize internal interfaces and prioritize hydrodynamic test-scale experiments, the NHTP is a component of the Integrated Experiments and NTS (IE&NTS) Program elements. IE&NTS ensures requirements, prioritization, as well as resource allocation, for all large-scale integrated experiments consistent with Laboratory commitments and milestones. Of particular importance is coordination of hydrodynamic tests with the subcritical experiments, which share experimentalists and diagnosticians. Interfaces with production agencies for war reserve-quality parts and with design agencies for requirements and for fabrication, assembly and experimental execution are very important.

Risk Identification and Mitigation Strategies: Detailed planning of hydrodynamic tests within each fiscal year optimizes resource utilization to meet overall test program milestones. Each hydrodynamic test is managed as a stand-alone project with dependencies on:

Funding:

- Risk – Failure to complete tests on schedule and in accordance with the test objectives would delay modeling and computational analyses and preclude timely resolution of weapons baselining, SFIs, life extension programs and other stockpile issues.
- Mitigation – The FYNSP funding levels are required to support and execute the FY2009 and out year hydrodynamic tests.

Facility availability:

- Risk – DARHT is the only weapon radiographic facility at LANL since PHERMEX closed in mid-FY04. Previously, and subject to funding, the number of hydrodynamic tests that can be fielded at DARHT was 4-6 per year due to the implementation of material mitigation required by the DARHT Record of Decision, annual cycle of inclement weather conditions, inefficient firing site operations and accelerator maintenance cycles. After completion of the DARHT-2 project, the facility will be able to support approximately one test a month in vessels, if three vessels are available (pending resource availability). Vessels or vessel components could be damaged which would reduce this potential throughput.
- Mitigation –A major capability improvement started in FY 2007 as a result of fielding specially designed vessel systems under development by the HTP and by Pit Certification via DynEx. We will need to continue invest in the appropriate vessel infrastructure and spare parts. In addition, better engineering, interface management, standardizing processes and procedures to improve conduct of operations are all anticipated because of organizational realignments under LANS. Furthermore, Lawrence Livermore National Laboratory's (LLNL) Contained Firing Facility (CFF) will be made available until closure of Site 300 at

incomplete engineering modifications at the firing point and incomplete information in the release database.

- Mitigation – Formality of operations is an evolving challenge. The DARHT firing point successfully obtained an updated Process Hazards Analysis (PrHA) on 31 March 2006.The LANL HTP is investing in DARHT firing point infrastructure improvements to complement the re-engineered Laboratory Integrated Work Process. It is expected that the additional engineering discipline required to integrate HTP activities with DynEx will further improve firing point conduct of operations. Materials control activities are specifically addressing the environmental release limits required by the DARHT Record of Decision. This work scope is linked to the detailed hydrodynamic test schedule.

Points of Contact:

Primary: Bret Knapp, Associate Director for Weapons Engineering, 505-665-7212, knapp1@lanl.gov

Secondary: David Funk, Hydrodynamic Experiments Division Leader, 505-665-9659, djf@lanl.gov

Level 2 Milestone A18.13 (MRT 3199): Provide the scientific and technical assistance to the production complex to support meeting established DoD and NNSA commitments in accordance with the Directive Schedule.
Due Date: September 2009

Activity Description: Design Agency authorizations, exceptions, and evaluations are routinely required in order to support continued production of systems, subsystems and components. The LANL Systems Engineering Division coordinates the LANL efforts necessary and provides the necessary documentation and direction to the Production Agencies.

Level 3 Milestones/Grading Criteria:

Description
Support Gas Transfer Systems (1M/2M, Acorn, LF7A, 3T/4T) with Engineering Releases as required.
Support Detonator Cable Assembly manufacturing (1E33, 1E34, and 1E38) with Engineering Releases as required.

Level 3 Milestones/Exit Criteria:

Description	Due Date
Production support activities briefed to NA-121.31 at the end of FY2009	September 2009

Integration/Interfaces: The assistance to the production complex is integrated by the Weapon Systems Engineering Division at LANL. This involves analysis of various subject matter experts as required. The resulting engineering release will be provided by the LANL DA through the Weapons Systems Engineering Division.

Risk Identification and Mitigation Strategies: Continued success of the production agencies depends on timely response from the LANL Design Agency. The risk is primarily to the production schedule. This risk is mitigated by providing a dedicated group to act as the Production Liaison. This group within the Weapons Systems Engineering Division monitors production activities and coordinates response from LANL as required.

Points of Contact:
Primary: John Benner, Weapon Systems Division Leader, 505-667-7198, benner@lanl.gov
Secondary: Lee Anderson, Production Liaison Group Leader, 505-667-2717, landerson@lanl.gov